AMENDMENT AND PRESENTATION OF CLAIMS

Please replace all prior claims in the present application with the following claims, in which claims 1, 6, 16, 18, 21, and 24 are currently amended, and claims 34 and 35 are newly presented.

1. (Currently Amended) A method of providing Internet Protocol (IP) communications over at least one network with Quality of Service (QoS), comprising the steps of:

initiating a communication session between at least one first end client device and at least one second end client device; and

in response to initiating the communication session, performing the steps of:

providing information to at least one server of the communication session according to a plurality of communication protocols including a first protocol for communication session establishment, a second protocol for deploying policy, and a third protocol for authorization of the communication session according to a QoS level, said information including policy information conveyed by the second protocol, and at least one of resource usage, authorization, authentication, and accounting information conveyed by the third protocol;

providing the information <u>by the one server</u> to at least one router of the communication session for enabling a Quality of Service policy in session packets arriving at the router <u>according to the second protocol</u>; and

establishing a communication session between said at least one first end client device and said at least one second end client device <u>according to the first protocol</u>.

2. (Previously Presented) The method as recited in claim 1, wherein the Quality of Service policy is in accordance with a Differentiated Services model, the one router altering a Differentiated Services field specifying Differentiated Services code points of the session packets.

3. (Previously Presented) The method as recited in claim 1, wherein the step of initiating a communication session is performed according to the first protocol, and further comprises the steps of:

a) sending an initiation message from said at least one first end client device to said at least one second end client device;

b) sending a message indicating receipt of said initiation message by the at least one second end client device;

c) sending a message indicating the at least one second end client device is responding to the initiation message; and

d) sending a message indicating a receipt of the message in (c) by the at least one first end client device and signaling the start of the communication session.

4. (Previously Presented) The method as recited in claim 3, wherein the first protocol includes Session Initiation Protocol (SIP).

5. (Original) The method as recited in claim 3, wherein said network includes at least one server for receiving and forwarding initiation messages.

6. (Currently Amended) The method as recited in claim 4, wherein said at least one server is a policy server, ~~the step of providing information to said at least one server of the communication session is according to the second protocol, and further comprises~~ the method further comprising the steps of:

a) sending a message requesting said at least one of resource usage, policy, authorization, authentication, and accounting information to at least one policy server; and

b) sending a message responding to the message in (a) with at least one of resource usage, policy, authorization, authentication, and accounting information;

wherein said at least one of resource usage, policy, authorization, authentication, and accounting information is according to the at least one QoS policy.

7. (Original) The method as recited in claim 6, wherein steps (a) and (b) are performed on a plurality of policy servers, one of the plurality of policy server being a local policy server for the first end client device, and one of the plurality of policy servers being a local policy server for the second end client device.

8. (Previously Presented) The method as recited in claim 6, wherein the second protocol includes Common Open Policy Service (COPS).

9. (Previously Presented) The method as recited in claim 1, wherein the step of providing information to at least one router of the communication session is according to the second protocol, and further comprises the steps of:

a) sending a message requesting a local policy decision,

b) sending a message installing policy to at least one router, and

c) sending a message confirming installation.

10. (Original) The method as recited in claim 9, wherein the at least one router performs according to a Differentiated Services model.

11. (Original) The method as recited in claim 9, wherein steps (a)-(c) are performed on a plurality of routers, one of the plurality of routers being a local router for the first end client device, and one of the plurality of routers being a local router for the second end client device.

12. (Previously Presented) The method as recited in claim 9, wherein the second protocol includes Common Open Policy Service (COPS).

13. (Previously Presented) The method as recited in claim 8, wherein said network includes at least one clearinghouse server, said clearinghouse server providing resource usage, policy, authentication, authorization, and accounting information to each of said plurality of policy servers, said method further comprising the steps of:

a) sending a message requesting at least one of resource usage, policy, authentication, authorization, and accounting information to the at least one clearinghouse server according to the third protocol, and

b) sending a message including at least one of resource usage, policy, authentication, authorization, and accounting information to the at least one policy server, according to the third protocol.

14. (Previously Presented) The method as recited in claim 13, wherein the third protocol includes Open Settlement Policy (OSP).

15. (Original) The method as recited in claim 1, wherein the network uses an authorization token to indicate that a session is authorized.

16. (Currently Amended) A method of providing Internet Protocol (IP) communications over at least one network with Quality of Service (QoS), comprising the steps of:

initiating termination of a communication session between at least one first end client device and at least one second end client device according to a first protocol; and

in response to initiating the termination, performing the steps of:

providing information to at least one server of the communication session according to a plurality of communication protocols including a the first protocol for communication session establishment, a second protocol for deploying policy, and a third protocol for authorization of the communication session according to a QoS level, said information including policy information conveyed by the second protocol, and at least one of resource usage, authorization, authentication, and accounting information conveyed by the third protocol; and

providing the information by the one server to at least one router of the communication session for de-installing a Quality of Service policy at the router according to the second protocol.

17. (Previously Presented) The method as recited in claim 16, wherein the Quality of Service policy is in accordance with a Differentiated Services model.

18. (Currently Amended) The method as recited in claim 16, ~~wherein the step of terminating a communication session is according to the first protocol, and~~ further ~~comprises~~ <u>comprising</u> the steps of:

    a) sending a termination message from the said at least first end client device to said at least one second end client device; and

    b) sending a message indicating receipt of said termination message by the at least one second end client device.

19. (Previously Presented) The method as recited in claim 18, wherein the first protocol includes a Session Initiation Protocol (SIP).

20. (Original) The method as recited in claim 16, wherein said network includes at least one additional server for receiving and forwarding termination messages.

21. (Currently Amended) The method as recited in claim 18, wherein said at least one server is a policy server, ~~the step of providing information to said at least one server of the communication session is according to the second protocol, and further comprises~~ <u>the method further comprising</u> the steps of:

    a) sending a message requesting the de-installation of policy corresponding to terminating the session to at least one policy server, and

    b) sending a message responding to the message in (a) confirming the de-installation of said policy.

22. (Original) The method as recited in claim 21, wherein steps (a) and (b) are performed a plurality of policy servers, one of the plurality of policy servers being a local policy server for the first end client device, and one of the plurality of policy servers being a local policy server for the second end client device.

23. (Previously Presented) The method as recited in claim 21, wherein the second protocol includes Common Open Policy Service (COPS).

24. (Currently Amended) The method as recited in claim 16, ~~wherein the step of providing information to at least one router of the communication session is according to the second protocol and,~~ further ~~comprises~~ comprising the steps of:

a) receiving a message requesting de-installation of a local policy decision corresponding to the terminating session,

b) sending a message directing a de-installation of said policy to at least one router, and

c) receiving a message confirming de-installation.

25. (Original) The method as recited in claim 24, wherein the at least one router performs according to a Differentiated Services model.

26. (Original) The method as recited in claim 24, wherein steps (a)-(c) are performed on a plurality of routers, one of plurality of routers being a local router for the first end client device, and one of the plurality of routers being a local router for the second end client device.

27. (Previously Presented) The method as recited in claim 24, wherein the second protocol includes Common Open Policy Service (COPS).

28. (Original) The method as recited in claim 24, wherein a policy server performs step (a), said method further comprising:

storing information concerning at least one of resource usage, policy, authorization, authentication, and accounting information concerning the terminating session.

29. (Previously Presented)   The method as recited in claim 27, wherein said network includes at least one clearinghouse server, said clearinghouse server storing resource usage, policy, authentication, authorization and accounting information for each of said plurality of policy servers according to the third protocol, said method further comprising the steps of:

a) sending a message reporting at least one of resource usage, policy, authentication, authorization, and accounting information concerning terminating the session to the at least one clearinghouse server; and

b) sending a message confirming the receipt of the message in step (a) to the at least one policy server.

30. (Previously Presented) The method as recited in claim 29, wherein the third protocol includes Open Settlement Policy (OSP).

31. (Original) The method as recited in claim 16, wherein the network uses an authorization token to indicate that a session is authorized.

32. (Withdrawn)

33. (Withdrawn)

34. (New) A method of supporting differentiated voice services over a data network, the method comprising:

receiving a call setup request for establishment of a call over the data network according to a

Session Initiation Protocol (SIP);

generating a first request for authentication, authorization, and accounting for the call

according to a Common Open Policy Service (COPS) protocol to a policy server that

generates, according to an Open Settlement Protocol (OSP), a second request specifying a

policy for the call based on the first request, and forwards the second request to a

clearinghouse server for authorization of the call according to the Open Settlement

Protocol (OSP);

receiving a decision message from the policy server authorizing the call according to the

COPS protocol upon the clearinghouse server responding to the second request; and

transmitting the call setup request to a SIP agent for establishment of the call in response to

the decision message.

35. (New) A method according to claim 32, further comprising:

instructing the policy server to install the policy in a router supporting the call.